



VPI/98-04 CON

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#3  
p/unk  
RECEIVED

3/28/01  
FEB 27 2001

TECH CENTER 1600/2900

Examiner : Not yet assigned

Group Art Unit : 1636

Applicant(s) : Xiaoling Xie et al.

Application No.: 09/706,128

Confirmation No.: 7839

Filed : November 3, 2000

For : CRYSTALLIZABLE JNK COMPLEXES

Hon. Commissioner for Patents  
Washington, D.C. 20231

STATEMENT UNDER 37 C.F.R. §§ 1.56 AND 1.97

Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97, applicants make  
of record the following documents\*:

UNITED STATES PATENT DOCUMENTS

<u>Inventor</u>	<u>Patent No.</u>	<u>Issue Date</u>
Carter	4,833,233	May 23, 1989
Subbiah	5,353,236	October 4, 1994
Su et al.	6,162,613	December 19, 2000

---

\* A completed Form PTO-1449 listing these documents is  
attached hereto.

RECEIVED

FEB 27 2001

FOREIGN PATENT DOCUMENTS

<u>Publication No.</u>	<u>Publication Date</u>	TECH CENTER 1600/2900
WO 92/14211	August 20, 1992	
WO 93/02209	February 4, 1993	
WO 94/25860	November 10, 1994	
WO 97/06246	February 20, 1997	
WO 97/15588	May 1, 1997	
WO 98/35048	August 13, 1998	

OTHER DOCUMENTS

D. Bossemeyer et al., "Phosphotransferase and Substrate Binding Mechanism of the cAMP-Dependent Protein Kinase Catalytic Subunit from Porcine Heart as Deduced from the 2.0 Å Structure of the Complex with Mn<sup>2+</sup> Adenylyl Imidodiphosphate and Inhibitor Peptide PKI(5-24)," The EMBO Journal, 12, pp. 849-859 (1993).

T.G. Boulton et al., "ERKs: A Family of Protein-Serine/Threonine Kinases that are Activated and Tyrosine Phosphorylated in Response to Insulin and NGF," Cell, 65, pp. 663-675 (1991).

D.G. Brown et al., "Crystallography in the Study of Protein-DNA Interactions," Methods in Molecular Biology, 56, pp. 293-318 (1996).

P.N. Bryan, "Protein Engineering," Biotech Adv., 5, pp. 221-234 (1987).

I.D. Campbell et al., "Diffraction, in Biological Spectroscopy," The Benjamin/Cummings Publishing Company, Inc., Menlo Park, CA, pp. 299-326 (1984).

B.J. Canagarajah et al., "Activation Mechanism of the MAP Kinase ERK2 by Dual Phosphorylation," Cell, 90, pp. 859-869 (1997).

E.J. Goldsmith et al., "Protein Kinases," Current Opinion in Structural Biology, 4, pp. 833-840 (1994).

S. Gupta et al., "Selective Interaction of JNK protein Kinase Isoforms with Transcription Factors," The EMBO Journal, 15, pp. 2760-2770 (1996).

J. Jancarik et al., "Sparse Matrix Sampling: A Screening Method for Crystallization of Proteins," J. Appl. Cryst., 24, pp. 409-411 (1991).

L.N. Johnson et al., "Active and Inactive Protein Kinases: Structural Basis for Regulation," Cell, 85, 149-158 (1996).

A. Kajihara et al., "Protein Modeling Using a Chimera Reference Protein Derived From Exons," Protein Eng'g, 6, pp. 615-620 (1993).

D.R. Knighton et al., "Crystal Structure of the Catalytic Subunit of Cyclic Adenosine Monophosphate-Dependent Protein Kinase," Science, 253, pp. 407-413 (1991).

D.R. Knighton et al., "Structure of Peptide Inhibitor Bound to the Catalytic Subunit of Cyclic Adenosine Monophosphate-Dependent Protein Kinase," Science, 253, pp. 414-420 (1991).

J.C. Lee et al., "A Protein Kinase Involved in the Regulation of Inflammatory Cytokine Biosynthesis," Nature, 372, pp. 739-746 (1994).

A.J. Russell et al., "Rational Modification of Enzyme Catalysis by Engineering Surface Charge," Nature, 328, pp. 496-500 (1987).

J. Singh et al., "Structure-Based Design of a Potent, Selective, and Irreversible Inhibitor of the Catalytic Domain of the erbB Receptor Subfamily of Protein Tyrosine Kinases," J. Med. Chem., 40, pp. 1130-1135 (1997).

S.S. Taylor et al., "Three Protein Kinase Structures Define a Common Motif," Structure, 2, pp. 345-355 (1994).

U. Uhlin et al., "Crystallization and Crystallographic Investigations of Ribonucleotide Reductase Protein R1 From *Escherichia Coli*," FEBS, 336, pp. 148-152 (1993).

K.P. Wilson et al., "Crystal Structure of p38 Mitogen-activated Protein Kinase," J. Biol. Chem., 271, pp. 27696-27700 (1996).

K.P. Wilson et al., "The Structural Basis for the Specificity of Pyridinylimidazole Inhibitors of p38 MAP Kinase," Chem. & Biol., 4, pp. 423-431 (1997).

X. Xie et al., "Crystal Structure of JNK3: A Kinase Implicated in Neuronal Apoptosis," Structure, 6, pp. 983-991 (1998).

F. Zhang et al., "Atomic Structure of the MAP Kinase ERK2 at 2.3 Å Resolution," Nature, 367, pp. 704-711 (1994).

J. Zhang et al., "Activity of the MAP Kinase ERK2 is Controlled by a Flexible Surface Loop," Structure, 3, pp. 299-307 (1995).

J. Zheng et al., "2.2 Å Refined Crystal Structure of the Catalytic Subunit of cAMP-Dependent Protein Kinase Complexed with MnATP and a Peptide Inhibitor," Acta Cryst., D49, pp. 362-365 (1993).

Applicants request that the cited documents be (1) fully considered by the Examiner during the course of examination of this application, and (2) printed on any patent issuing from this application. Applicants further request that a copy of form PTO-1449, as considered and initialed by the Examiner, be returned with the next communication.

Respectfully submitted,

*L. Su*

---

James F. Haley (Reg. No. 27,794)  
Lisa A. Dixon (Reg. No. 40,995)  
Attorneys for Applicants  
Li Su (Reg. No. 45,141)  
Agent for Applicants  
c/o FISH & NEAVE  
1251 Avenue of the Americas  
New York, New York 10020-1104  
Tel.: (212) 596-9000  
Fax.: (212) 596-9090

I Hereby Certify that this  
Correspondence is being  
Deposited with the U.S.  
Postal Service as First  
Class Mail in an Envelope  
Addressed to: ASSISTANT  
COMMISSIONER FOR  
PATENTS  
WASHINGTON, D.C. 20231 on

*February 22, 2001*  
Chaire J. Saintil

*[Signature]*  
Signature of Person Signing



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner : Not yet assigned

Group Art Unit : 1636

Applicant(s) : Xiaoling Xie et al.

Application No.: 09/706,128 Confirmation No.: 7839

Filed : November 3, 2000

For : CRYSTALLIZABLE JNK COMPLEXES

RECEIVED

FEB 27 2001

TECH CENTER 1600/2900

New York, New York  
February 22, 2001

Hon. Commissioner for Patents  
Washington, D.C. 20231

TRANSMITTAL LETTER FOR  
INFORMATION DISCLOSURE STATEMENT

Sir:

Transmitted herewith is an Information Disclosure Statement under 37 C.F.R. §§ 1.56 and 1.97 in the above-identified application. This Statement is submitted:

☐ within three months of the application filing date;

☒ more than three months from the application filing date but before the mailing date of the first Office Action on the merits.

[ ] after the mailing date of a first Office Action on the merits but before the mailing date of a Final Action or a Notice of Allowance.

Pursuant to 37 C.F.R. 1.97(b)(3), no fee is due in connection with this Information Disclosure Statement. If, for any reason, any fees are due, the Commissioner is hereby authorized to charge payment of any fees required in connection with this Information Disclosure Statement to Deposit Account No. 06-1075. A duplicate copy of this letter is transmitted herewith.

Respectfully submitted,



James F. Haley (Reg. No. 27,794)  
Lisa A. Dixon (Reg. No. 40,995)  
Attorneys for Applicants  
Li Su (Reg. No. 45,141)  
Agent for Applicants  
c/o FISH & NEAVE  
1251 Avenue of the Americas  
New York, New York 10020-1104  
Tel.: (212) 596-9000  
Fax.: (212) 596-9090

I Hereby Certify that this  
Correspondence is being  
Deposited with the U.S.  
Postal Service as First  
Class Mail in an Envelope  
Addressed to: ASSISTANT  
COMMISSIONER FOR  
PATENTS  
WASHINGTON, D.C. 20231 on

  
Claire J. Santtil

  
Signature of Person Signing